Gear Drive Remanufacturing Keeps Mills Online

B&W Roll Wheel® pulverizers are a vital part of coal preparation systems and are built to last under severe conditions. To maintain peak mill operating conditions, systematic maintenance procedures are critical. In particular, gear drives require a comprehensive remanufacturing program to maintain high availability and optimize service life. Babcock & Wilcox (B&W) offers many services to support the operation of gear drive assemblies:

- Original equipment manufacturer (OEM) replacement parts to exacting specifications
- Equipment upgrading
- Remanufacturing services
- Technical expertise

Replace, refurbish or reuse?
Upon dismantling the drive, all key components (including shafts, gearsets and housings) are thoroughly cleaned prior to a nondestructive examination (NDE). The NDE results identify which key components are suitable for reuse in the process. Also, in the uncommon event of drive failure during service, it is important to identify the probable failure mechanism before remanufacturing the unit. Gear drives operating under severe conditions can experience component failures resulting from a loss of lubrication, corrosion and a variety of other problems.

B&W’s process of remanufacturing gear drive assemblies involves an in-depth inspection prior to re-assembly. After conducting in-depth inspections and examinations, B&W provides a detailed report that specifies the disposition of each gear drive component – parts are designated for replacement, refurbishment or reuse. Customer input is obtained at this important decision point in the remanufacturing process.

Remanufactured and guaranteed to meet B&W’s OEM standards
Upon customer review of the inspection report, remanufacturing requirements are established. Complete refurbishment of the gear drive is performed to B&W’s exacting OEM specifications. Critical custom fitting procedures are performed on all bearings, shims, shaft retainer plates and bearing caps to ensure that the drive is returned to its original dimensional standards and quality.

Remanufactured assemblies are subjected to a six-hour no-load spin test (typically only performed on new drives), and are then prepared and preserved for indoor storage. A complete summary of the service inspection and job report is sent to the owner.

Customized programs offer flexible solutions and options
B&W can customize a gear drive remanufacturing program that includes all similar mills within a power plant.

B&W’s experience has shown that preventing just one gear drive failure easily justifies the cost associated with a quality rebuild.
A thorough inspection and examination is conducted on each roll wheel pulverizer gear drive assembly to determine which parts are to be designated for replacement, refurbishment or reuse.


generation system. Our Master Services Rebuild Agreement provides the flexibility to rebuild a specified number of drives during a time period that is consistent with long-term maintenance and outage requirements.

B&W also offers a gear drive exchange program to meet the needs of customers that do not have excess mill capacity. We stock remanufactured gear drives that include all of our recommended upgrades. These gear drives are available for immediate shipment.

**Service and support you can count on**

Backed by experienced engineering support, B&W’s remanufacturing facilities are equipped with the labor, materials and machining capabilities essential to performing quality gear drive restoration. All full-scope rebuilds are backed by B&W’s standard full-service product warranty. Delivery is timed to meet plant schedules and requirements.

Our experience indicates that preventing just one gear drive failure easily justifies the cost associated with a quality restoration. However, in the event of an emergency or unscheduled outage, B&W’s Customer Service Line is available around-the-clock for complete emergency assistance. Call 1-800-354-4400 and extend the service life of your pulverizer drives with a Babcock & Wilcox remanufacturing program.